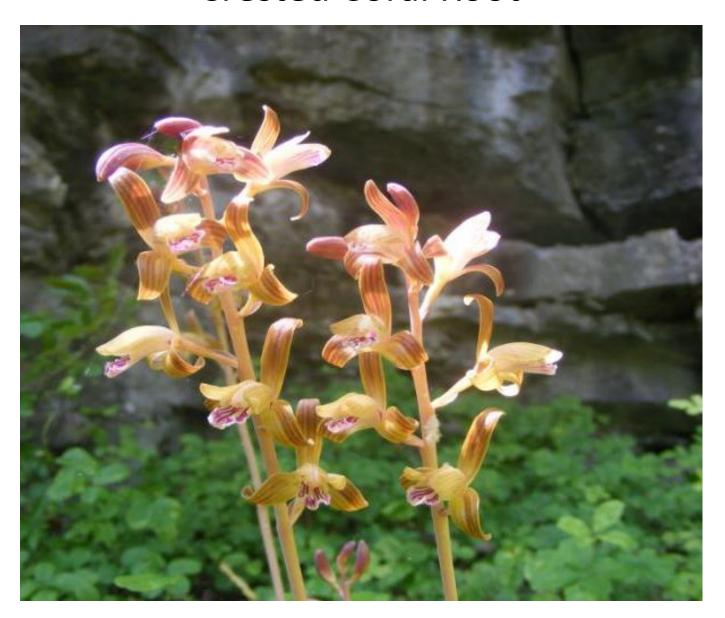
Crested Coral Root



Invasive Plant Removal

Field Trip in Seneca Park at 2:30pm

Major Waltman
Project Director
Olmsted Parks Conservancy

Resources for invasive plant management:

- Olmstedparksconservancy.org
 Projects videos of management techniques
- 2. Plant Conservation Alliance (PCA alien plant working group)
- 3. Invasiveplants.org
- 4. https://plants.usda.gov/factsheet/pdf/fs_mesa.pdf
- 5. www.invasivespeciesinfo.gov/plants/factsheets
- 6. www.weedcenter.org/inv plant info/fact-sheets
- 7. youtube/olmstedparksconservancy

Steps to invasive plant removal:

- ID your invasive plant or plants.
- Determine the extent of the invasion.
- How much are you willing to spend funds available.
- Determine what technique to use for removal.
- Install cover crop if necessary.
- Develop a restoration plan what should the area look like after removal.

Four Common Invasive Woody Plants:

- Bush Honeysuckle Lonicera maackii
- Winter Creeper Euonymous fortunei
- Porcelain Berry Ampelopsis brevipedunculata
- Japanese Honeysuckle Lonicera japonica

Amur Honeysuckle Lonicera maackii









Bush Honeysuckle dominating the understory



Bush Honeysuckle

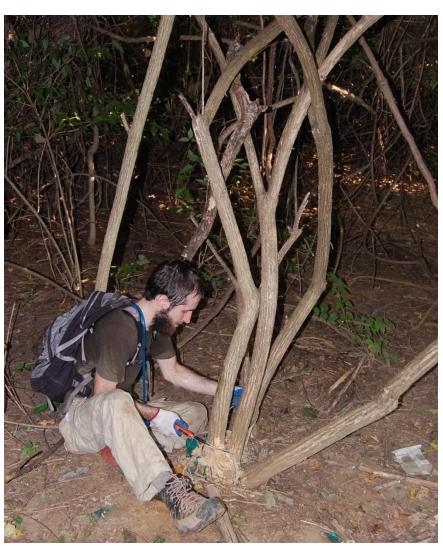
- •Will leaf out earlier than our native shrubs and outcompetes the native herbaceous plants for sunlight.
- •Reduces sapling growth by 90%.
- •Primary seed dispersal by birds.



How bad can it get?







Bush Honeysuckle

- •Forms dense thickets and prohibits native plant development.
- •Reduces native herbaceous cover by nearly 100%.
- •Reduces basal area growth of canopy trees by 16-20%.



Porcelainberry Ampelopsis brevipedunculata







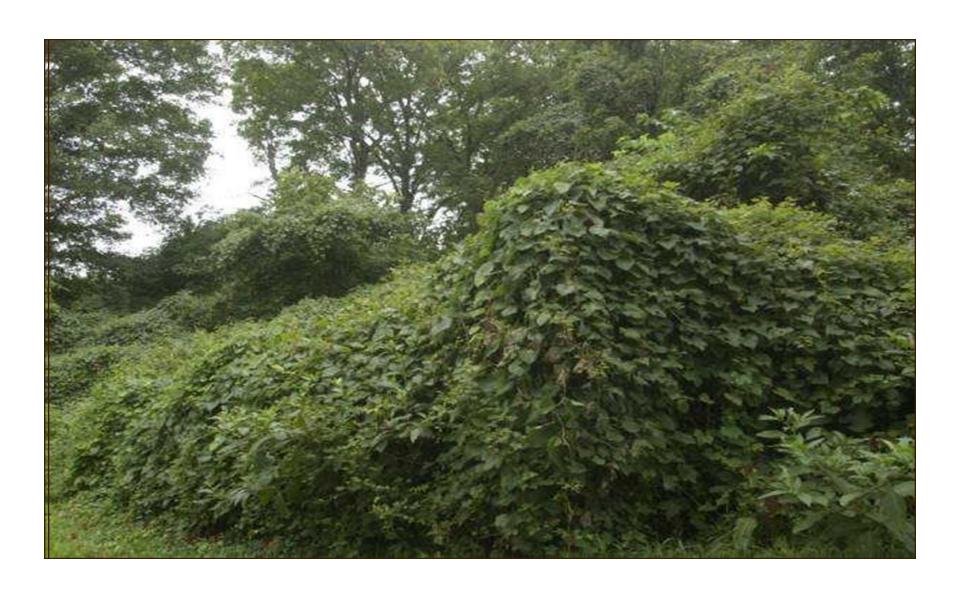
Porcelain Berry

Ampelopsis brevipedunculata Vitaceae





Porcelain Berry



- Determine the extent of the invasion.
 - Just a few plants
 - acres of invasives
- How much are you willing to spend funds available.

***These factors inform the technique to use.

REMOVAL TECHNIQUES

- 1. Woody Shrubs Bush Honeysuckle
 - Cut stump followed by herbicide application to the stump (50% glyphosate)
 - Cut stump, allow plant to re-sprout and then apply herbicide to new growth (3% glyphosate).
 - Foliar spray Apply herbicide to the leaves of the shrub (3% glyphosate)
 - Forestry mulcher Cut and mulch entire plant and then foliar spray resprouts (3% glyphosate).

20% solution Glyphosate herbicide application to cut stump



Large Machines









- 2. Woody vine ground covers Wintercreeper, Vinca, English Ivy, etc.
 - Foliar spray with 3% glyphosate + surfactant (methylated seed oil)
 - Weed eat leafy vegetation, allow re-sprouts, apply foliar spray to resprouts.
 - Use organic herbicide as a foliar spray (Pelargonic Acid Scythe, Cinnamon Oil/Clove Oil – Weed Zap combination).

All applications of herbicides, including organic herbicides, on ground covers will require at least two applications for an effective kill.

NOTE: Read all labels for herbicides.

Resprouting of *L. maackii*





Tools for invasive removal









Power tools and hand sprayer

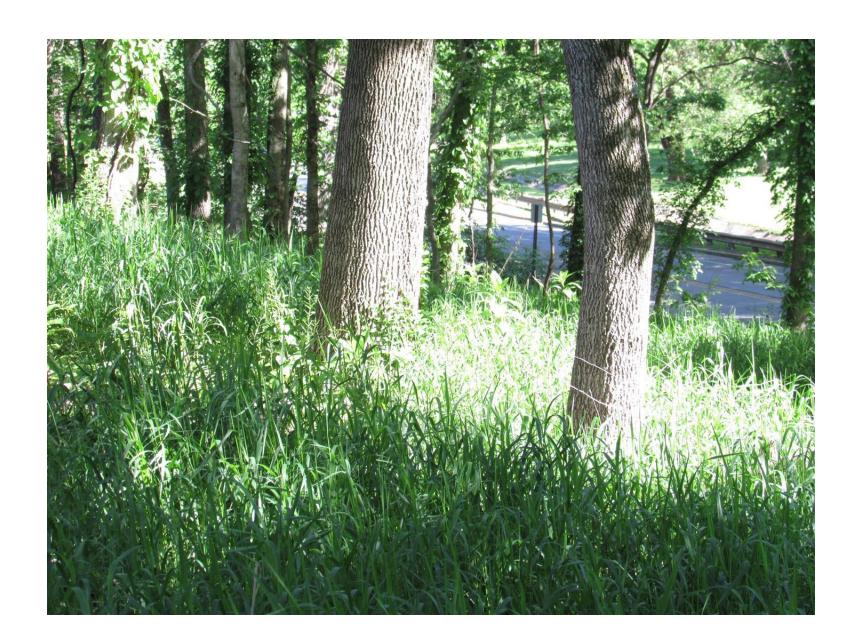


In a large removal area, be prepared for anything and everything to come up. By removing a woody shrub such as Bush Honeysuckle, light levels to the forest floor are increased resulting in the germination of many other plants including new invasives such as Garlic Mustard, Ground Ivy, and an increase in Euonymous and English Ivy cover.

COVER CROPS

- Wild Oats (Avena sativa)
- Millet
- Wheat (*Triticum aestivum*) allelopathic
- Annual Rye (Lolium multiflorum) allelopathic
- Perrinial Rye (Lolium perene) allelopathic
- Red Top (Agrostis alba)
- Red Fescue (Festuca rubra)

Virginia Wild Rye and Canada Wild Rye in the Woodlands



Virginia Wild Rye And Canada Wild Rye

